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(72) Inventor: **Amemiya, Kimio**
Koufu-shi, Yamanashi (JP)

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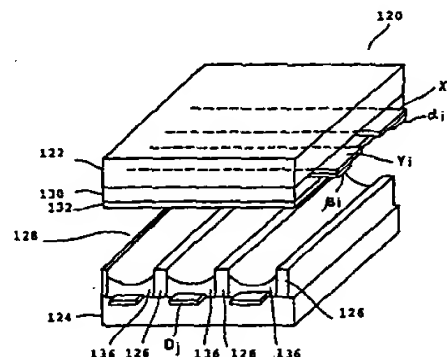
(74) Representative:
Klingseisen, Franz, Dipl.-Ing.
Patentanwälte,
Dr. F. Zumstein,
Dipl.-Ing. F. Klingseisen,
Postfach 10 15 61
80089 München (DE)

(71) Applicant:
PIONEER ELECTRONIC CORPORATION
Meguro-ku Tokyo (JP)

(54) **Surface discharge AC plasma display apparatus and driving method therefor**

(57) A plasma display apparatus which improves the contrast of images displayed thereon. A plurality of paired row electrodes X_i , Y_i are formed in parallel with each other in a surface discharge AC plasma display apparatus. A plurality of column electrodes are formed facing to the paired row electrodes through a discharge space, and extend perpendicularly to the paired row electrodes so as to define a unit light emitting region including an intersection formed every time the column electrode cross with the paired row electrodes. A gas mixture including Ne·Xe is sealed in the discharge space at a pressure ranging from 400 torr to 600 torr. The row electrodes in the unit light emitting region are formed to have a width w of 300 μm or more. The intensity of light emitted by discharge not related to display is suppressed.

FIG. 1





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EUROPEAN SEARCH REPORT

Application Number
EP 96 12 0778

DOCUMENTS CONSIDERED TO BE RELEVANT			
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Y	---	4	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 March 1999	Examiner O'Reilly, D
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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A	EP 0 657 861 A (FUJITSU LTD.) 14 June 1995 * column 22, line 42 - column 24, line 7; figure 11 *	8-17	
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Place of search THE HAGUE		Date of completion of the search 12 March 1999	Examiner O'Reilly, D
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1,8-12

Width row electrode 300 micrometer or more.

2. Claims: 2-7

Limited region for initialization-discharge.

3. Claims: 13-17

Waveform of first pre-discharge pulse.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 96 12 0778

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82